



US Army Corps
of Engineers
St. Paul District

Information Paper

Environmental Protection: Mississippi River, Bank Stabilization, Minn/Wis/Iowa



Rockfill bank stabilization at Harpers Slough in pool 9, Iowa.

Contact

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Location/Description

Part of the Corps' Environmental Management Program (EMP), the riverbank erosion sites are located in pools 5 through 10 on the Minnesota, Wisconsin, and Iowa sides of the Mississippi River. All of the sites lie within the Upper Mississippi River National Wildlife and Fish Refuge. The primary resource problem is severe erosion occurring at many locations along the Mississippi River. The loss of landmass and the associated increases in flow and/or sedimentation result in the loss and shallowing of aquatic habitat in adjacent backwaters and adversely affect circulation patterns and water quality in the backwaters.

The project included the stabilization of a total of about 12,000 feet of riverbank. Out of 55 potential stabilization sites, 12 sites were selected on the basis of the cost for habitat benefits gained, agency priorities, location, available funds, and construction considerations. Rockfill was used to stabilize the sites. Some limited dredging for access was also performed. Sites selected for stabilization included two sites in pool 6, one site in pool 7, one site in pool 8, three sites in pool 9, and five sites in pool 10.

The project directly reduces erosion and created about 4 acres of rock habitat that is beneficial to fish such as smallmouth bass. About 1,500 acres of aquatic habitat are benefitted. The project also improves water quality in some backwater areas by reducing or maintaining side channel flows.

Status

Stabilization of the sites was done in stages, beginning in pool 10 in September 1995 and ending in pool 6 in September 1999. Three of the 12 sites were completed with funds provided by the U.S. Fish and Wildlife Service.

Authority

The Mississippi River Bank Stabilization Habitat Project was planned under the authority of the Upper Mississippi River System - Environmental Management Program (EMP) and constructed in accordance with a Definite Project Report dated August 1995. The EMP was authorized by Section 1103 of the Water Resources Development Act of 1986, and reauthorized by the Water Resources Development Act of 1999.

The project was planned and designed as part of a cooperative effort of the U.S. Army Corps of Engineers; the Iowa, Minnesota, and Wisconsin Departments of Natural Resources; the U.S. Fish and Wildlife Service; and local interests.

Fiscal

Project design and construction costs were 100 percent Federal because all of the sites in the project were located on national wildlife refuge lands. Operation and maintenance costs are 100 percent Federal (a responsibility of the U.S. Fish and Wildlife Service).

Federal cost	\$1,697,000
Non-Federal cost	\$0
Total cost	\$1,697,000